

AMENDMENTS TO THE CLAIMS

Claims 1-13 (canceled).

14. (Currently Amended) A process for coating internals in a reactor, except for the coating of electrically heatable, at least partly open-cell foams, with a catalytically active material or a precursor thereof, in which an aerosol which contains the catalytically active material or the precursor thereof as a disperse phase is provided and the aerosol is passed through the reactor at a rate in the range from 0.1 to 4 m/s, which is established so that the disperse phase of the aerosol is deposited on the internals in the reactor and wherein the reactor is used for carrying out oxidation or hydrogenation reactions and the oxidation or dehydrogenation reactions are synthesis of maleic anhydride, phthalic anhydride, acrolein, (meth)acrylic acid or ethylene oxide.

15. (Previously presented) A process as claimed in claim 14, wherein the aerosol is passed through the reactor at a velocity in the range from 0.2 to 4 m/s.

16. (Previously presented) A process as claimed in claim 14, wherein the disperse phase of the aerosol has a particle size of from 0.1 to 10 μm .

17. (Previously presented) A process as claimed in claim 14, wherein the aerosol is produced by dry comminution of a solid catalyst or of a precursor of a solid catalyst, to a particle size of from 0.1 to 10 μm metering and dispersing in an inert gas stream.

18. (Previously Presented) A process as claimed in claim 14, wherein the aerosol is produced by comminuting, by means of nozzles, a liquid which may have been heated or a liquid mixture, or a solution, suspension or emulsion which may have been superheated.

19. (Previously presented) A process as claimed in claim 14, wherein the internals are formed from moldings which are movable relative to one another and are present in the form of a fixed bed, fluidized bed or moving bed.

20. (Previously presented) A process as claimed in claim 14, wherein the internals are present in the form of a consolidated, porous system.

21. (Previously presented) A process as claimed in of claim 14, which comprises internals having ordered flow channels.
22. (Previously presented) A process as claimed in claim 14, wherein the internals are pipes through which a heating medium is passed.
23. (Previously presented) A process as claimed in claim 14, wherein the disperse phase deposited on the internals in the reactor is subjected to further process steps.
24. (Previously presented) A process as claimed in claim 14, wherein the coating is an initial coating.
25. (Previously presented) A process as claimed in claim 14, wherein the coating comprises a reactivation of catalyst material on the surface of internals in a reactor.
26. (Cancelled)
27. (Previously presented) A process as claimed in claim 15, wherein the aerosol is passed through the reactor and the velocity in the range from 0.2 to 2 m/s.
28. (Previously presented) A process as claimed in claim 16, wherein the disperse phase of the aerosol has a particle size of from 0.5 to 5 μm .
29. (Previously presented) A process as claimed in claim 17, wherein the solid catalyst has a particle size of from 0.2 to 5 μm and the inert gas stream is a nitrogen stream.
30. (Previously presented) A process as claimed in claim 20, wherein the consolidated, porous system is woven fabric, knitted fabric, braid or foam; except for electrically heatable foams.
31. (Previously presented) A process as claimed in claim 21, wherein the internals are stacked packings or monoliths.
32. (Previously presented) A process as claimed in claim 22, wherein the pipes are ribbed pipes.

33. (Previously presented) A process as claimed in claim 23, wherein the disperse phase deposited on the internals in the reactor is further fixed, activated and/or calcined.
34. (Cancelled)
35. (Cancelled)
36. (Previously presented) A process as claimed in claim 27, wherein the disperse phase of the aerosol has a particle size of from 0.5 to 5 μm .